

Remarks

Novelty Rejection – Japanese Patent No. 06-122803 (Translation attached)

At present, Claims 1 – 18 are rejected under 35 U.S.C. §102(b) as being anticipated by Japanese Patent No. 06-122803 to Kozo (JP'803). Reconsideration of this rejection is requested in view of the following remarks.

For the novelty rejection to stand, all the limitations in the claims must be taught or inherent in the single reference. Such is not the case here.

JP'803 is deficient in a number of ways. JP'803 pertains to resins for absorbing “radiation rays and electromagnetic waves” (see Summary – p. 2). It does not even mention that paramagnetic properties can be imparted to a composition by inclusion of rare earth elements (one skilled in the art understands that there are substantial differences between “absorbing electromagnetic waves” and “imparting paramagnetic properties”).

JP'803 provides a list of rare earth elements, most of which are outside the present invention (lanthanum, cerium, praseodymium, ytterbium and ruthenium), and does not provide any suggestion or motivation to pick the ones that happen to be used in the present invention. JP'803 provides no teaching or suggestion of using a “sufficient amount” of “specific rare earth elements” to get a “magnetic mass susceptibility of at least 20×10^{-6} emu/g at 298 °K.” Indeed, JP'803 provides for rare earth amounts of as little as 0.001 weight percent. At this level, the effect sought in JP'803 (ability to absorb ionizing radiation and electromagnetic radiation – p. 4, paragraph [0001]) can be achieved (see p. 5, paragraph [0007]). There is no way that the magnetic mass susceptibility of at least 20×10^{-6} emu/g at 298 °K could be achieved at such levels.

While higher levels of rare earth can be used according to JP'803 or the purpose of JP'803 (selective absorptivity and emissivity of ionizing radiation and electromagnetic radiation in addition to having weather resistance and increased refractive index of base resin – See Advantages on p. 2), there is no teaching that higher levels are used with thulium or dysprosium or any other rare earth ion of the present invention to obtain the magnetic mass susceptibility of at least 20×10^{-6} emu/g at 298 °K. The higher levels are not exemplified for thulium and dysprosium. The only higher levels (20 weight percent) exemplified are for praseodymium (not within presently claimed invention) in Working Examples 5 – 7.

Thulium (element 69, incorrectly identified as element 81, which is thallium, at p. 5, paragraph [0004]) and dysprosium (element 66) are the only rare earth elements in the current Claims 1 – 18 disclosed in JP'803 (see Summary). Thulium and dysprosium are exemplified in JP'803 (see Working Example 8 and Working Example 9).

In Working Example 8, thulium methacrylate is indicated as being present at 8 weight percent (8 grams out of 100 total). This is less than the at least 9 weight percent required in claim 7 – 12, and there is no suggestion that it would be sufficient in the final polymerized composition to obtain a magnetic mass susceptibility of at least 20×10^{-6} emu/g at 298 °K.

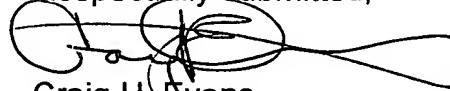
In Working Example 9, dysprosium methacrylate is indicated as being present at 4 weight percent (4 grams out of 100 total) in combination with another rare earth salt, neodymium methacrylate also being present at 4 weight percent. This is less than the at least 5 weight percent required in claim 13 – 18, and there is no suggestion that it would be sufficient in the final polymerized composition to obtain a magnetic mass susceptibility of at least 20×10^{-6} emu/g at 298 °K.

In view of the above, Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) rejection over Japanese Patent No. 06-122803.

Conclusion

In view of the above remarks, it is felt that all claims are in condition for allowance and such action is requested. Should the Examiner believe that an interview or other action in Applicant's behalf would be helpful, the Examiner is urged to contact Applicant's attorney by telephone at (302) 992-3219.

Respectfully submitted,



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